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<b>Terms</b>	<b>Documents</b>
49037893	0

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49037893

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**Search History****Today's Date: 5/16/2001**

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
JPAB	49037893	0	<a href="#">L40</a>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	49037893	0	<a href="#">L39</a>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	4937893	5	<a href="#">L38</a>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	2321847	11	<a href="#">L37</a>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	2635029	9	<a href="#">L36</a>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	2407773	12	<a href="#">L35</a>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	1474697	4	<a href="#">L34</a>
	mold near10 (flux or granular or powder) and (slab or billet or ingot) and (continuous adj casting) and (flow or pour) near5 (flux or granular or powder) and ceramic		
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	mold near5 (flux or granular or powder) and (slab or billet or ingot) and (continuous adj casting) and (flow or	16	<a href="#">L33</a>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD		12	<a href="#">L32</a>

	pour) near5 (flux or granular or powder) and ceramic		
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	mold near5 (flux or granular or powder) and (slab or billet or ingot) and (continuous adj casting) and (flow or pour) near5 (flux or granular or powder)	93	<u>L31</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	mold near5 (flux or granular or powder) and (slab or billet or ingot) and (continuous adj casting) and (flow or pour) near10 (flux or granular or powder)	126	<u>L30</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	mold near5 (flux or granular or powder) and (slab or billet or ingot) and (continuous adj casting) and (flow or pour)	282	<u>L29</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	mold near5 (flux or granular or powder) and (slab or billet or ingot) and (continuous adj casting)	687	<u>L28</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	mold near5 (flux or granular or powder) and (slab or billet or ingot)	1704	<u>L27</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	mold and (pinch adj valve) and (flux or granular or powder)	16	<u>L26</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	(mold near3 flux) and (pinch adj valve)	0	<u>L25</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	mold and (pinch adj valve)	97	<u>L24</u>
USPT	119 and mold and (pinch adj valve)	5	<u>L23</u>
USPT	119 and (continuous adj casting) and mold and (pinch adj valve)	0	<u>L22</u>
USPT	119 and (continuous adj casting) and mold	323	<u>L21</u>
USPT	119 and (continuous adj casting)	358	<u>L20</u>
USPT	11 or l2 or l3 or l4 or l5 or l6 or l7 or l8 or l9 or l10 or l11 or l12 or l13 or l14 or l15 or l16 or l17 or l18	3438	<u>L19</u>
USPT	((251/5)!.CCLS.))	457	<u>L18</u>
USPT	((118/308)!.CCLS.))	1005	<u>L17</u>
USPT	((239/13)!.CCLS.))	144	<u>L16</u>
USPT	((222/527)!.CCLS.))	267	<u>L15</u>
USPT	((222/64)!.CCLS.))	412	<u>L14</u>
USPT	((164/449.1)!.CCLS.))	60	<u>L13</u>
USPT	((164/155.4)!.CCLS.))	109	<u>L12</u>
USPT	((164/155.2)!.CCLS.))	57	<u>L11</u>
USPT	((164/155.1)!.CCLS.))	45	<u>L10</u>
USPT	((164/154.1)!.CCLS.))	62	<u>L9</u>
USPT	((164/151.2)!.CCLS.))	88	<u>L8</u>
USPT	((164/150.1)!.CCLS.))	92	<u>L7</u>

USPT	((164/267)!.CCLS.))	104	<u>L6</u>
USPT	((164/412)!.CCLS.))	198	<u>L5</u>
USPT	((164/473)!.CCLS.))	174	<u>L4</u>
USPT	((164/472)!.CCLS.))	157	<u>L3</u>
USPT	((164/470)!.CCLS.))	70	<u>L2</u>
USPT	((164/268)!.CCLS.))	93	<u>L1</u>

**WEST****End of Result Set** **Generate Collection**

L37: Entry 11 of 11

File: DWPI

Nov 28, 1974

DERWENT-ACC-NO: 1974-84641V

DERWENT-WEEK: 197449

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TITLE: Adding iron powder to molten metal in continuous casting - forms dense zone at core of cast bars and slabs thus preventing pipe

## PATENT-ASSIGNEE:

ASSIGNEE	CODE
GRIESHEIM GMBH	MESG

PRIORITY-DATA: 1973DE-2321847 (April 30, 1973)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE <u>2321847</u> A	November 28, 1974	N/A	000	N/A

INT-CL (IPC): B22D 11/10

ABSTRACTED-PUB-NO: DE 2321847A

## BASIC-ABSTRACT:

Iron powder is loaded to a main hopper, from which it travels to an intermediate hopper and then down a tube set at 20 degrees from the horizontal to a jet, which, is set at 15-25 degrees (pref. 20 degrees) from the vertical axis of the stream of molten metal going from a ladle into the mould. The end of the jet should be 30-40mm from the stream of molten metal and as near to the point where the stream joins the molten metal in the mould as possible, viz. 0-50mm but pref. approaching zero. An inert gas, esp. Ar is used above the powder in the intermediate hopper at a press. of 0.01-0.1 at mu (pref. 0.03-0.05) to push the powder down the jet. By this method of addn. the iron powder goes to, and remains at, the centre of the billet being continuously cast, thus consolidating the structure at the core and preventing the formation of pipe or cracks. From 1-5% iron powder (w.r.t. the molten metal wt.) is used.

TITLE-TERMS: ADD IRON POWDER MOLTEN METAL CONTINUOUS CAST FORM DENSE ZONE CORE CAST BAR SLAB PREVENT PIPE

DERWENT-CLASS: M22 P53

CPI-CODES: M22-G03A;

## End of Result Set

 Generate Collection

L36: Entry 9 of 9

File: DWPI

Feb 9, 1990

DERWENT-ACC-NO: 1990-093339

DERWENT-WEEK: 199013

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TITLE: Automatic feed device for a continuous casting machine - feeding a powder or granular material to the mould

INVENTOR: MANCINI, J; PONTOIRE, J N

## PATENT-ASSIGNEE:

ASSIGNEE	CODE
IRSID INST RECH SIDERURGIE FR	IRSF

PRIORITY-DATA: 1988FR-0010700 (August 8, 1988)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
FR 2635029 A	February 9, 1990	N/A	010	N/A

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
FR 2635029A	August 8, 1988	1988FR-0010700	N/A

INT-CL (IPC): B22D 11/07

ABSTRACTED-PUB-NO: FR 2635029A

## BASIC-ABSTRACT:

An automatic device is claimed for feeding a powder or granular material to a continuous casting mould and comprising (a) a storage hopper (8) for the powdered or granular flux (3); (b) a pipe (9) to transfer the flux from the hopper to the free surface (13) of the metal cast into the mould; (c) a feeding device in the form of a vibrator (11) at the outlet (14) of the hopper; and (d) a valve (10) for regulating the flow of the flux, this valve being arranged downstream of the vibrator in the sense of flow of the flux. The regulation valve may be electrically operated from a remote point in response to the speed of casting.

USE/ADVANTAGE - The device is used for the controlled automatic feeding of powdered or granular material onto the free surface of a metal being cast in a continuous casting machine to act as a lubricant between the metal and the walls of the mould. It enables the flow of such material to be kept to an economic low level whether the material is in powdered or granular form. The simplicity of the device ensures a high reliability, low space requirement and a low cost. A number of feed pipes can be provided to ensure full coverage of the meniscus of the metal in the continuous casting mould.

CHOSEN-DRAWING: Dwg.1/1

TITLE-TERMS: AUTOMATIC FEED DEVICE CONTINUOUS CAST MACHINE FEED POWDER GRANULE

## End of Result Set

 

L36: Entry 9 of 9

File: DWPI

Feb 9, 1990

DERWENT-ACC-NO: 1990-093339

DERWENT-WEEK: 199013

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TITLE: Automatic feed device for a continuous casting machine - feeding a powder or granular material to the mould

INVENTOR: MANCINI, J; PONTOIRE, J N

## PATENT-ASSIGNEE:

ASSIGNEE	CODE
IRSID INST RECH SIDERURGIE FR	IRSF

PRIORITY-DATA: 1988FR-0010700 (August 8, 1988)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
FR <u>2635029</u> A	February 9, 1990	N/A	010	N/A

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
FR 2635029A	August 8, 1988	1988FR-0010700	N/A

INT-CL (IPC): B22D 11/07

ABSTRACTED-PUB-NO: FR 2635029A

## BASIC-ABSTRACT:

An automatic device is claimed for feeding a powder or granular material to a continuous casting mould and comprising (a) a storage hopper (8) for the powdered or granular flux (3); (b) a pipe (9) to transfer the flux from the hopper to the free surface (13) of the metal cast into the mould; (c) a feeding device in the form of a vibrator (11) at the outlet (14) of the hopper; and (d) a valve (10) for regulating the flow of the flux, this valve being arranged downstream of the vibrator in the sense of flow of the flux. The regulation valve may be electrically operated from a remote point in response to the speed of casting.

USE/ADVANTAGE - The device is used for the controlled automatic feeding of powdered or granular material onto the free surface of a metal being cast in a continuous casting machine to act as a lubricant between the metal and the walls of the mould. It enables the flow of such material to be kept to an economic low level whether the material is in powdered or granular form. The simplicity of the device ensures a high reliability, low space requirement and a low cost. A number of feed pipes can be provided to ensure full coverage of the meniscus of the metal in the continuous casting mould.

CHOSEN-DRAWING: Dwg.1/1

TITLE-TERMS: AUTOMATIC FEED DEVICE CONTINUOUS CAST MACHINE FEED POWDER GRANULE

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L35: Entry 11 of 12

File: DWPI

Jul 6, 1979

DERWENT-ACC-NO: 1979-58502B

DERWENT-WEEK: 197932

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TITLE: Flux feed appts. for use with continuous casting - located on ladle service plants, allows access to ladle carriage

## PATENT-ASSIGNEE:

ASSIGNEE	CODE
CONCAST AG	CNAS

PRIORITY-DATA: 1977CH-0013436 (November 4, 1977)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
FR 2407773 A	July 6, 1979	N/A	000	N/A
CH 623758 A	June 30, 1981	N/A	000	N/A
IT 1100698 B	September 28, 1985	N/A	000	N/A

INT-CL (IPC): B22D 1/00; B22D 11/10

ABSTRACTED-PUB-NO: FR 2407773A

## BASIC-ABSTRACT:

Feeding appts. for introducing powdered flux into at least one ingot mould of a continuous casting plant for making steel, is equipped with a feed device arranged on the carriage which carries the pouring ladle. The device receives the flux in powder form from a storage vessel and measuring valve, or doser, and it extends as far as the mould cavity. Specifically, the storage vessel and the measuring valve are arranged separately from the feed appts., which is moved with ladle, at a location above the casting platform. The flux feed appts. does not interfere with access to the ladle wagon. It is not necessary for each wagon to carry a storage vessel for flux and a measuring valve, hence the installation costs are reduced. The location of the doser away from the hot zone gives rise to reduce maintenance costs, and makes the casting process less susceptible to perturbations. Fewer flexible feed tubes are required.

TITLE-TERMS: FLUX FEED APPARATUS CONTINUOUS CAST LOCATE LADLE SERVICE PLANT  
ALLOW ACCESS LADLE CARRIAGE

DERWENT-CLASS: M22 P53

CPI-CODES: M22-G03A;

**WEST** **Generate Collection**

L35: Entry 11 of 12

File: DWPI

Jul 6, 1979

DERWENT-ACC-NO: 1979-58502B

DERWENT-WEEK: 197932

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TITLE: Flux feed appts. for use with continuous casting - located on ladle service plants, allows access to ladle carriage

## PATENT-ASSIGNEE:

ASSIGNEE	CODE
CONCAST AG	CNAS

PRIORITY-DATA: 1977CH-0013436 (November 4, 1977)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
FR <u>2407773</u> A	July 6, 1979	N/A	000	N/A
CH 623758 A	June 30, 1981	N/A	000	N/A
IT 1100698 B	September 28, 1985	N/A	000	N/A

INT-CL (IPC): B22D 1/00; B22D 11/10

ABSTRACTED-PUB-NO: FR 2407773A

## BASIC-ABSTRACT:

Feeding appts. for introducing powdered flux into at least one ingot mould of a continuous casting plant for making steel, is equipped with a feed device arranged on the carriage which carries the pouring ladle. The device receives the flux in powder form from a storage vessel and measuring valve, or doser, and it extends as far as the mould cavity. Specifically, the storage vessel and the measuring valve are arranged separately from the feed appts., which is moved with ladle, at a location above the casting platform. The flux feed appts. does not interfere with access to the ladle wagon. It is not necessary for each wagon to carry a storage vessel for flux and a measuring valve, hence the installation costs are reduced. The location of the doser away from the hot zone gives rise to reduce maintenance costs, and makes the casting process less susceptible to perturbations. Fewer flexible feed tubes are required.

TITLE-TERMS: FLUX FEED APPARATUS CONTINUOUS CAST LOCATE LADLE SERVICE PLANT  
ALLOW ACCESS LADLE CARRIAGE

DERWENT-CLASS: M22 P53

CPI-CODES: M22-G03A;

**WEST** **Generate Collection**

L36: Entry 7 of 9

File: EPAB

Feb 9, 1990

PUB-NO: FR002635029A1

DOCUMENT-IDENTIFIER: FR 2635029 A1

TITLE: Device for automatically supplying a continuous-casting ingot mould with powdery or granular product

PUBN-DATE: February 9, 1990

## INVENTOR-INFORMATION:

NAME

COUNTRY

MANCINI, JOEL

N/A

PONTOIRE, JEAN-NOEL

N/A

## ASSIGNEE-INFORMATION:

NAME

COUNTRY

SIDERURGIE FSE INST RECH

FR

APPL-NO: FR08810700

APPL-DATE: August 8, 1988

## PRIORITY-DATA:

US-CL-CURRENT: 164/473

INT-CL (IPC): B22D 11/07

EUR-CL (EPC): B22D011/10

## ABSTRACT:

This device for supplying an ingot mould with a stream in the powdery or granular state comprises a hopper 8 for storing the stream 3, a pipe 9 for transferring the said stream, a member for advancing the stream from the storage hopper to the ingot mould, and a valve for adjusting the flow rate of the stream; according to the invention, the said adjustment valve 10 is located on the transfer pipe 9, and the member for advancing the product is a vibrator 11 arranged upstream of the adjustment valve 10 in the direction of the flow of the stream.

**WEST****End of Result Set** **Generate Collection**

L37: Entry 11 of 11

File: DWPI

Nov 28, 1974

DERWENT-ACC-NO: 1974-84641V

DERWENT-WEEK: 197449

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TITLE: Adding iron powder to molten metal in continuous casting - forms dense zone at core of cast bars and slabs thus preventing pipe

## PATENT-ASSIGNEE:

ASSIGNEE	CODE
GRIESHEIM GMBH	MESG

PRIORITY-DATA: 1973DE-2321847 (April 30, 1973)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE <u>2321847</u> A	November 28, 1974	N/A	000	N/A

INT-CL (IPC): B22D 11/10

ABSTRACTED-PUB-NO: DE 2321847A

## BASIC-ABSTRACT:

Iron powder is loaded to a main hopper, from which it travels to an intermediate hopper and then down a tube set at 20 degrees from the horizontal to a jet, which, is set at 15-25 degrees (pref. 20 degrees) from the vertical axis of the stream of molten metal going from a ladle into the mould. The end of the jet should be 30-40mm from the stream of molten metal and as near to the point where the stream joins the molten metal in the mould as possible, viz. 0-50mm but pref. approaching zero. An inert gas, esp. Ar is used above the powder in the intermediate hopper at a press. of 0.01-0.1 at mu (pref. 0.03-0.05) to push the powder down the jet. By this method of addn. the iron powder goes to, and remains at, the centre of the billet being continuously cast, thus consolidating the structure at the core and preventing the formation of pipe or cracks. From 1-5% iron powder (w.r.t. the molten metal wt.) is used.

TITLE-TERMS: ADD IRON POWDER MOLTEN METAL CONTINUOUS CAST FORM DENSE ZONE CORE CAST BAR SLAB PREVENT PIPE

DERWENT-CLASS: M22 P53

CPI-CODES: M22-G03A;

	Type	Hits	Search Text	DBs
1	IS&R	93	("164/268").CCLS.	USPAT
2	IS&R	70	("164/470").CCLS.	USPAT
3	IS&R	157	("164/472").CCLS.	USPAT
4	IS&R	174	("164/473").CCLS.	USPAT
5	IS&R	198	("164/412").CCLS.	USPAT
6	IS&R	104	("164/267").CCLS.	USPAT
7	IS&R	92	("164/150.1").CCLS.	USPAT
8	IS&R	88	("164/151.2").CCLS.	USPAT
9	IS&R	62	("164/154.1").CCLS.	USPAT
10	IS&R	45	("164/155.1").CCLS.	USPAT
11	IS&R	57	("164/155.2").CCLS.	USPAT
12	IS&R	109	("164/155.4").CCLS.	USPAT
13	IS&R	60	("164/449.1").CCLS.	USPAT
14	IS&R	412	("222/64").CCLS.	USPAT
15	IS&R	267	("222/527").CCLS.	USPAT
16	IS&R	144	("239/13").CCLS.	USPAT
17	IS&R	1005	("118/308").CCLS.	USPAT
18	IS&R	457	("251/5").CCLS.	USPAT

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4	2001/05/15 16:51			0
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6	2001/05/16 08:08			0
7	2001/05/16 08:12			0
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9	2001/05/16 08:19			0
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17	2001/05/16 09:56			0
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**Search History****Today's Date: 5/16/2001**

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USPT,PGPB,JPAB,EPAB,DWPI,TDBD	2407773	12	<a href="#">L35</a>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	1474697	4	<a href="#">L34</a>
	mold near10 (flux or granular or powder) and (slab or billet or ingot) and (continuous adj casting) and (flow or pour) near5 (flux or granular or powder) and ceramic		
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	mold near5 (flux or granular or powder) and (slab or billet or ingot) and (continuous adj casting) and (flow or	16	<a href="#">L33</a>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	ceramic	12	<a href="#">L32</a>

	pour) near5 (flux or granular or powder) and ceramic		
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	mold near5 (flux or granular or powder) and (slab or billet or ingot) and (continuous adj casting) and (flow or pour) near5 (flux or granular or powder)	93	<u>L31</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	mold near5 (flux or granular or powder) and (slab or billet or ingot) and (continuous adj casting) and (flow or pour) near10 (flux or granular or powder)	126	<u>L30</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	mold near5 (flux or granular or powder) and (slab or billet or ingot) and (continuous adj casting) and (flow or pour)	282	<u>L29</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	mold near5 (flux or granular or powder) and (slab or billet or ingot) and (continuous adj casting)	687	<u>L28</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	mold near5 (flux or granular or powder) and (slab or billet or ingot)	1704	<u>L27</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	mold and (pinch adj valve) and (flux or granular or powder)	16	<u>L26</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	(mold near3 flux) and (pinch adj valve)	0	<u>L25</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	mold and (pinch adj valve)	97	<u>L24</u>
USPT	119 and mold and (pinch adj valve)	5	<u>L23</u>
USPT	119 and (continuous adj casting) and mold and (pinch adj valve)	0	<u>L22</u>
USPT	119 and (continuous adj casting) and mold	323	<u>L21</u>
USPT	119 and (continuous adj casting)	358	<u>L20</u>
USPT	11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 110 or 111 or 112 or 113 or 114 or 115 or 116 or 117 or 118	3438	<u>L19</u>
USPT	((251/5)!.CCLS.))	457	<u>L18</u>
USPT	((118/308)!.CCLS.))	1005	<u>L17</u>
USPT	((239/13)!.CCLS.))	144	<u>L16</u>
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USPT	((164/449.1)!.CCLS.))	60	<u>L13</u>
USPT	((164/155.4)!.CCLS.))	109	<u>L12</u>
USPT	((164/155.2)!.CCLS.))	57	<u>L11</u>
USPT	((164/155.1)!.CCLS.))	45	<u>L10</u>
USPT	((164/154.1)!.CCLS.))	62	<u>L9</u>
USPT	((164/151.2)!.CCLS.))	88	<u>L8</u>
USPT	((164/150.1)!.CCLS.))	92	<u>L7</u>

USPT	((164/267)!.CCLS.))	104	<u>L6</u>
USPT	((164/412)!.CCLS.))	198	<u>L5</u>
USPT	((164/473)!.CCLS.))	174	<u>L4</u>
USPT	((164/472)!.CCLS.))	157	<u>L3</u>
USPT	((164/470)!.CCLS.))	70	<u>L2</u>
USPT	((164/268)!.CCLS.))	93	<u>L1</u>

	Type	Hits	Search Text	DBs
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3	IS&R	157	("164/472").CCLS.	USPAT
4	IS&R	174	("164/473").CCLS.	USPAT
5	IS&R	198	("164/412").CCLS.	USPAT
6	IS&R	104	("164/267").CCLS.	USPAT
7	IS&R	92	("164/150.1").CCLS.	USPAT
8	IS&R	88	("164/151.2").CCLS.	USPAT
9	IS&R	62	("164/154.1").CCLS.	USPAT
10	IS&R	45	("164/155.1").CCLS.	USPAT
11	IS&R	57	("164/155.2").CCLS.	USPAT
12	IS&R	109	("164/155.4").CCLS.	USPAT
13	IS&R	60	("164/449.1").CCLS.	USPAT
14	IS&R	412	("222/64").CCLS.	USPAT
15	IS&R	267	("222/527").CCLS.	USPAT
16	IS&R	144	("239/13").CCLS.	USPAT
17	IS&R	1005	("118/308").CCLS.	USPAT
18	IS&R	457	("251/5").CCLS.	USPAT

	<b>Time Stamp</b>	<b>Comments</b>	<b>Error Definition</b>	<b>Errors</b>
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2	2001/05/15 16:40			0
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**WEST****End of Result Set** **Generate Collection**

L36: Entry 9 of 9

File: DWPI

Feb 9, 1990

DERWENT-ACC-NO: 1990-093339

DERWENT-WEEK: 199013

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TITLE: Automatic feed device for a continuous casting machine - feeding a powder or granular material to the mould

INVENTOR: MANCINI, J; PONTOIRE, J N

## PATENT-ASSIGNEE:

ASSIGNEE	CODE
IRSID INST RECH SIDERURGIE FR	IRSF

PRIORITY-DATA: 1988FR-0010700 (August 8, 1988)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
FR 2635029 A	February 9, 1990	N/A	010	N/A

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
FR 2635029A	August 8, 1988	1988FR-0010700	N/A

INT-CL (IPC): B22D 11/07

ABSTRACTED-PUB-NO: FR 2635029A

## BASIC-ABSTRACT:

An automatic device is claimed for feeding a powder or granular material to a continuous casting mould and comprising (a) a storage hopper (8) for the powdered or granular flux (3); (b) a pipe (9) to transfer the flux from the hopper to the free surface (13) of the metal cast into the mould; (c) a feeding device in the form of a vibrator (11) at the outlet (14) of the hopper; and (d) a valve (10) for regulating the flow of the flux, this valve being arranged downstream of the vibrator in the sense of flow of the flux. The regulation valve may be electrically operated from a remote point in response to the speed of casting.

USE/ADVANTAGE - The device is used for the controlled automatic feeding of a powdered or granular material onto the free surface of a metal being cast in a continuous casting machine to act as a lubricant between the metal and the walls of the mould. It enables the flow of such material to be kept to an economic low level whether the material is in powdered or granular form. The simplicity of the device ensures a high reliability, low space requirement and a low cost. A number of feed pipes can be provided to ensure full coverage of the meniscus of the metal in the continuous casting mould.

CHOSEN-DRAWING: Dwg.1/1

TITLE-TERMS: AUTOMATIC FEED DEVICE CONTINUOUS CAST MACHINE FEED POWDER GRANULE

## WEST

 Generate Collection

L36: Entry 7 of 9

File: EPAB

Feb 9, 1990

PUB-NO: FR002635029A1

DOCUMENT-IDENTIFIER: FR 2635029 A1

TITLE: Device for automatically supplying a continuous-casting ingot mould with powdery or granular product

PUBN-DATE: February 9, 1990

## INVENTOR-INFORMATION:

NAME

COUNTRY

MANCINI, JOEL

N/A

PONTOIRE, JEAN-NOEL

N/A

## ASSIGNEE-INFORMATION:

NAME

COUNTRY

SIDERURGIE FSE INST RECH

FR

APPL-NO: FR08810700

APPL-DATE: August 8, 1988

## PRIORITY-DATA:

US-CL-CURRENT: 164/473

INT-CL (IPC): B22D 11/07

EUR-CL (EPC): B22D011/10

## ABSTRACT:

This device for supplying an ingot mould with a stream in the powdery or granular state comprises a hopper 8 for storing the stream 3, a pipe 9 for transferring the said stream, a member for advancing the stream from the storage hopper to the ingot mould, and a valve for adjusting the flow rate of the stream; according to the invention, the said adjustment valve 10 is located on the transfer pipe 9, and the member for advancing the product is a vibrator 11 arranged upstream of the adjustment valve 10 in the direction of the flow of the stream. 